

REMARKS

Claims 1 and 16 are amended. Claims 1-16, as amended, remain in the application. No new matter is added by the amendment of the claims

The Examiner objected to Claim 16 because the end of last sentence reads, "from a lowered position for engaging and disengaging from a load to a fully raised position". The Examiner believes that the statement was intended to be written as follows: "from a lowered position for engaging and disengaging a load a fully raised position".

Applicant amended Claim 16 to delete the word "from" in the last line. However, it appears that the Examiner inadvertently omitted the word "to" after the word "load" in his suggested revision. Therefore, Applicant did not delete the word "to" from the last line of Claim 16. Applicant also notes that the last lines of Claims 1 and 8 contain the "engaging and disengaging from" language. Applicant will amend these claims in a similar manner if the Examiner believes that it is necessary.

The Examiner rejected Claims 1-4 and 7 under 35 U.S.C. 103(a) as being unpatentable over Jesswein (6,010,299) in view of Hamlin (2,643,779) and Mortimore (Pub. No. 2001/0026756).

The Examiner stated that Jesswein discloses a lift apparatus for supporting motorcycles and small vehicles comprising a ground engaging base frame (1) having a pair of spaced apart upwardly extending posts (7) and a pair of generally horizontally extending legs (2) with ground engaging roller assemblies attached to their outer ends, said legs each having an inner end adjacent one of said posts and an outer end, said leg inner ends being spaced a first predetermined distance apart and said leg outer ends being spaced a second predetermined distance apart, a pair of parallelogram linkages, each said linkage having an upper link, a lower link extending generally parallel to said upper link an outer link, and an inner link formed by a portion of an associated one of said posts, said upper link being connected by first and second pivot means (each including an axle about which, at least one of said links pivots) to said inner and outer links respectively, said lower link being connected by third and fourth pivot means (each including an axle about which, at least one of said links pivots) to said inner and outer links respectively, a support means including a pair of spaced apart support arms attached to said outer

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links capable of supporting a vehicle and a manually actuated hydraulic actuator that acts as an actuator means having a lower end pivotally connected to said base frame and an upper end pivotally connected to said lower links whereby extension of said actuator means raises said vehicle support means between a lowered position for engaging and disengaging from a vehicle and a fully raised position. The Examiner admitted that Jesswein does not disclose that the second predetermined distance between leg outer ends is greater than said first predetermined distance between leg inner ends or that the base frame includes a pair of ground engaging caster assemblies or that the support means is attached at one end to a lower end of each of said outer links and has a free end extending away from said linkages.

The Examiner stated that Hamlin discloses an automobile transmission handling jack that is formed to have a stable base (col. 1, lines 23-25) consisting of a base with a pair of generally horizontally extending legs, said legs each having an inner end and an outer end, said leg inner ends being spaced a first predetermined distance apart and said leg outer ends being spaced a second predetermined distance apart greater than said first predetermine distance. The Examiner further stated that Hamlin also discloses that the base is caster-wheel-mounted for movability (col. 2, line 17).

According to the Examiner, Mortimore discloses a vehicle lift using parallel linkages and a manually operated actuator wherein the vehicle support means (16) is attached at one end to a lower end of an outer link (60), has a free end extending away from said linkages and includes a pair of spaced apart support arms (100 and 102). It is the Examiner's opinion that the arrangement disclosed by Mortimore allows the support means to be positioned closer to the ground, thus making it easier to place a vehicle on the support without needing to lift the vehicle into place and , therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to space the outer end of the legs in the invention of Jesswein further apart than the inner ends to increase stability of the base structure and to replace the base mounted wheels of Jesswein with casters to increase the movability of the lifting apparatus as taught by Hamlin. The Examiner also believes that it also would have been obvious to replace the support means of Jesswein with the support means of Mortimore and connect the support means to the lower end of the outer linkages to allow for easy placement of a vehicle on the support means.

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Jesswein does not disclose a lift apparatus for supporting motorcycles and small vehicles as stated by the Examiner. Jesswein describes a device for lifting and positioning building materials at different heights and angles. The Jesswein device has a platform assembly formed from a pair of cross members 16 and a pair of platform carrier members 17. The platform assembly can be pivoted from horizontal (see Figs. 2b and 2c) and is totally unsuited for supporting motorcycles and small vehicles.

Jesswein does not have "an actuator having a lower end pivotally connected to said base frame and an upper end pivotally connected to said lower links" as defined by Claim 1. In Jesswein, a floor jack 6 rests on a pair of front jack supports 4 and a rear jack support 5, but is not pivotally connected to the base frame or the lower links. A push link 24 has an upper end pivotally connected to the lower lift arms 13 and a lower end that rests on top of the floor jack 6. Thus, Jesswein does not include the actuator as defined by Claim 1.

Hamlin shows an automobile transmission handling jack having a pair of members 10 diverging at outer free ends. There is no teaching of the combination of Jesswein and Hamlin as suggested by the Examiner. The side members 2 of Jesswein must be maintained in a parallel relationship because the front jack supports 4 are adjustable to accommodate different length jacks 6 (see Col. 3, Lines 8-9).

Applicant amended Claim 1 to clarify that the vehicle support means extends horizontally from one end attached to a lower end of each of the outer links and a free end. Mortimore shows an elevator platform assembly 16 attached to a lower end of a vertically extending lift arm 82 that is attached to an upper mounting plate 60. Thus, the Mortimore platform assembly 16 does not have one end attached to a lower end of the outer links since it is attached to the lift arm 82. Also, the Mortimore platform assembly 16 does not have a free end extending away from the linkages since the ends of the frame members 94 and 96 are attached to the track 102.

The Examiner rejected Claim 5 under 35 U.S.C. 103(a) as being unpatentable over Jesswein (299), Hamlin ('779) and Mortimore ('756) and further in view of Butts ('203) which the Examiner stated discloses a jack for light aircraft and provides a resilient pad to the aircraft engaging portion of the jack to distribute loading on the aircraft surfaces and protect the aircraft from damage. However, Butts does not provide the claimed elements missing from the combination of references as explained above.

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The Examiner rejected Claim 6 under 35 U.S.C. 103(a) as being unpatentable over Jesswein ('299), Hamlin ('779) and Mortimore ('756) and further in view of Rishovd ('183) which the Examiner stated discloses a vehicle jack with a main upright post that has a handle attached to either side near the top of the post. However, Rishovd does not provide the claimed elements missing from the combination of references as explained above.

The Examiner rejected Claims 8-12 and 15 under 35 U.S.C. 103(a) as being unpatentable over Styles (5,356,214) in view of West (5,372,353), Hamlin ('779) and Mortimore ('756). In reference to Claim 8, the Examiner stated that Styles discloses a lift apparatus comprising a ground engaging base frame having a generally horizontally extending central beam (18) with a pair of spaced apart upwardly extending posts (68) and a pair of generally horizontally extending legs (73) fixedly attached to said central beam, said legs each having an inner end adjacent one of said posts and an outer end, said leg inner ends being spaced a first predetermined distance apart and said leg outer ends being spaced a second predetermined distance apart, a pair of parallelogram linkages (44 and 46), each said linkage having an upper link (44), a lower link (46) extending generally parallel to said upper link, an outer link (28), and an inner link formed by a portion of an associated one of said posts, said upper link being connected by first and second pivot means (80) to said inner and outer links respectively, said lower link being connected by third and fourth pivot means (80) to said inner and outer links respectively, a support means (32) attached to said outer links and an actuator means (74) having a lower end indirectly pivotally connected to said base frame through the upwardly extending posts, and an upper end pivotally connected to said lower links whereby extension of said actuator means raises the support means between a lowered position for engaging and disengaging from a vehicle and a fully raised position. Styles however, fails to disclose that the horizontally extending central beam has an associated one of a pair of generally vertically extending intermediate beams fixedly attached at each end thereof, each said intermediate beam having an upper end with an associated one of a pair of generally horizontally extending end beam beings fixedly attached thereto, that the second predetermined distance between the outer ends of the legs is greater than the first predetermined distance between the inner ends of the legs, or that the support means may be a vehicle support.

The Examiner stated that West discloses a lift wherein the base comprises a horizontally extending central beam (86) having an associated one of a pair of generally vertically extending

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intermediate beams (36) fixedly attached at each end thereof, each said intermediate beam having an upper end with an associated one of a pair of generally horizontally extending end beam (34) beings fixedly attached thereto with casters attached to the lower side of each of the end beams. According to the Examiner, the arrangement provided by West allows for the base frame to be closer to the ground, thus lowering the center of gravity and making the lift more stable while allowing space between the frame and the ground for casters with larger diameter wheels to make the apparatus more easily maneuverable.

The Examiner stated that Hamlin discloses the automobile transmission handling jack, as discussed supra having a stable base (col. 1, lines 23-25) that is caster-wheel-mounted for movability (col. 2, line 17).

The Examiner stated that Mortimore discloses the vehicle lift, as discussed supra that allows the support means to be positioned closer to the ground, thus making it easier to place a vehicle on the support without needing to lift the vehicle into place. Therefore, according to the Examiner, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the central beam of Styles with a pair of vertically extending intermediate beams fixedly attached at each end thereof, each said intermediate beam having an upper end with an associated one of a pair of generally horizontally extending end beam beings fixedly attached thereto with casters attached to the lower side of each of the end beams, as taught by West, to improve stability and make the lift easier to maneuver. According to the Examiner, it also would have been obvious to make the distance between the outer ends of the legs greater than the distance between the inner ends of the legs to further improve stability, as taught by Hamlin, and to replace the support member of Styles with that of Mortimore to allow the lift of Styles to lift vehicles such as motorcycles from a low point on the ground that would have made it easier to load a vehicle onto the support.

Applicant first notes that Styles shows a mixer support structure that is not related to a lift apparatus for motorcycles and small vehicles. Styles teaches that the linkages enable raising and lowering a rotating shaft in a vertical translation. That operation is the opposite of the claimed invention which maintains a vehicle support means in a horizontal position as defined by amended independent Claim 8. Also, the Styles actuator 74 is pivotally connected to the posts 68 instead of the base frame as defined by Claim 8.

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There is no teaching of the combination of Styles and West suggested by the Examiner. The Styles mixer support structure does not need the base frame to be closer to the ground, thus lowering the center of gravity, because the mixer must be high enough to be positioned over open large containers such as 55 gallon drums on totes. Also, there is no need to allow space between the frame and the ground for casters with larger diameter wheels to make the apparatus more easily maneuverable because such casters can be accommodated by changing the height of the posts 68.

There is no teaching of substituting the base of Hamlin for the base of Styles. The legs 73 of Styles are already widely spaced in order to extend on either side of a 55 gallon drum. Also, the Styles mixer is centered between the legs whereas the Applicant's claimed lift apparatus is intended to lift loads that extend transverse to the support arms.

There is no teaching in Styles or Mortimore that the Styles mixer support structure could be converted to lift motorcycles and small vehicles by substituting the Mortimore platform assembly 16 for the Styles mixer support.

In reference to Claim 9, the Examiner stated that the lift of Styles provides an axle (80) for each of the first through fourth pivot means. However, Styles does not provide the claimed elements missing from the combination of references as explained above.

In reference to Claim 10, the Examiner stated that the obvious alteration to the base of Styles, as taught by West, provides casters (28) to the outer ends of each of the end beams to allow for maneuverability. As explained above, Styles does not provide the claimed elements missing from the combination of references and there is no reason to substitute the West base for the Styles base.

In reference to Claim 11, the Examiner stated that the lift of Styles provides for ground engaging roller assemblies attached to the outer end of the legs. However, Styles does not provide the claimed elements missing from the combination of references as explained above.

In reference to Claim 12, the Examiner stated that the obvious alteration to the support of Styles, as taught by Mortimore, includes a pair of spaced apart support arms (100 and 102). As explained above, Styles does not provide the claimed elements missing from the combination of references and there is no reason to substitute the Mortimore support for the Styles support.

In reference to Claim 15, the Examiner stated that the lift of Styles provides a manually actuated hydraulic actuator. However, Styles does not provide the claimed elements missing from the combination of references as explained above.

The Examiner rejected Claim 13 under 35 U.S.C. 103(a) as being unpatentable over Styles (5,356,214), West (5,372,353), Hamlin ('779) and Mortimore ('756) and further in view of Butts ('203). According to the Examiner, the combination of Styles, West, Hamlin and Mortimore discloses the lifting apparatus as discussed supra but fails to provide padding on the load supporting surface of the support arms and Butts discloses a jack that provides a resilient pad to the engaging portion of the jack to distribute loading protect from damage.

Butts does not provide the other claimed elements missing from the combination of references as explained above.

The Examiner rejected Claim 14 under 35 U.S.C. 103(a) as being unpatentable over Styles (5,356,214), West (5,372,353), Hamlin ('779) and Mortimore ('756) and further in view of Rishovd ('183). According to the Examiner, the combination of Styles, West, Hamlin and Mortimore discloses the lifting apparatus as discussed supra but fails to provide handles attached to an upper end of each post which Rishovd discloses in a vehicle jack with a main upright post that has a handle attached to either side near the top of the post.

Rishovd does not provide the other claimed elements missing from the combination of references as explained above.

The Examiner rejected Claim 16 under 35 U.S.C. 103(a) as being unpatentable over Styles (5,356,214), West (5,372,353), Hamlin ('779) and Mortimore ('756) and further in view of Butts ('203) and Rishovd ('183). According to the Examiner, the combination of Styles, West, Hamlin and Mortimore discloses the lifting apparatus as discussed supra but fails to provide padding on the load supporting surface of the support arms or provide handles attached to an upper end of each post. The Examiner stated that Butts and Rishovd disclose the jacks discussed supra and advantages to providing padding on the load supporting surface of the support arms and handles attached to an upper end of each post.

The six references cited by the Examiner represent such dissimilar devices as a mixer support structure, a truck transmission jack, an automobile transmission jack, a van mounted lift for a mobility scooter, a jack for light aircraft and a vehicle jack. While the Examiner has located

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some of the elements defined by Claim 16, there is no teaching in the cited references of the combination suggested by the Examiner. The Examiner has not explained the motivation of one of ordinary skill in the art to convert the Styles mixer support structure into a lift apparatus for motorcycles and small vehicles. There is no suggestion in Styles or the other cited references to make the substitutions suggested by the Examiner. Therefore, the combinations set forth by the Examiner would not be obvious.

In view of the amendments to the claims and the above arguments, Applicant believes that the claims of record now define patentable subject matter over the art of record. Accordingly, an early Notice of Allowance is respectfully requested.